American Crossarm and Conduit STSM/Five-Year Review Briefing

Location: South side of the City of Chehalis, Lewis County within the 100-year flood plain of the Chehalis and Newaukam rivers.

Operational History: 14 acre former wood treating facility composed of four areas including wood treatment works, kilns, mill, and a landfill. The wood treatment area, which contained underground tanks, a surface impoundment, and a control room, was used to treat wood with mixture of diesel and pentachlorophenol ("PCP"). The landfill, used from the 1930s to 1985, was located south of the former mill. The landfill was used to dispose of wood waste and other debris from operation of the mill and treatment works. The contaminants of concern are carcinogenic polyaromatic hydrocarbons (CPAHs), PCP, and dioxin/furans.

In late 1983, American Crossarm and Conduit Company ("ACCC") stopped the wood milling and treatment operations. Several floods occurred in the next few years, releasing contamination to the surrounding area. In 1986, the Chehalis River flooded the Site spreading approximately 10,000 gallons of PCP-diesel solution to the Chehalis Avenue area (a commercial/residential section of the city which includes a playfield) and potentially to the wetlands (~37 acres) and Dillenbaugh Creek.

An emergency action was taken to cleanup contamination from this flood. Contaminated soil, debris, furniture, and other material were placed on the facility. In 1988, an incinerator was brought on the facility to incinerate the principle threat, generating approximately 20 tons of ash. Prior to that in 1987, contaminated sludge and sediment were removed from the surface impoundment.

Remedial Action Objectives:

- Excavation of low-level contaminated soil in the Chehalis Avenue area to meet Washington State model Toxics Control Act (MTCA) Method B (residential) cleanup standards.
- Demolition of facility structures and recycling of material.
- Excavation of facility soil from the most contaminated areas and disposal at an approved off-site hazardous waste landfill.
- Removal of contaminated sediment in the lagoon and stormwater sewer to meet ambient water criteria (AWCG) and MTCA cleanup standards for surface water in Dillenbaugh Creek.
- Removal of floating product underneath the treatment works to meet Safe Drinking Water Act (SWDA) maximum contaminant levels (MCLs) and MTCA cleanup levels of groundwater at the facility boundary.
- Site re-grading and installation of vegetated cover to meet MTCA cleanup standards through containment and institutional controls.

Remedial Action:

• Abandonment of wells. (Five existing off-site monitoring wells were maintained for performance monitoring.)



- Removal and off-site disposal of drums containing filtercake, contaminated soil and water, chemicals, PCB capacitors, sludge's and solvents.
- Removal of lagoon sediment, reconfiguration of the lagoon and relining of the storm drain sewer from Chehalis Avenue to the lagoon to mitigate infiltration into the buried pipeline.
- Excavation of soil from in and under the surface impoundment, under and around the treatment works, between the mill and kilns, and from the remaining surface location of the treatment area.
- Collection of floating product found in the excavations under the treatment works.
- On-site treatment and off-site disposal of the soil and sediment removed from the lagoon and from beneath the treatment area surface impoundment.
- Excavation of soil in the residential area and consolidation on the facility. Backfill of residential area with clean soil and revegetation.
- Placement of a clean soil cover on the facility, fine grading of the cover and revegetation. The site was rough graded and covered with geotextile and 1 foot of pit run. After all areas had been covered and graded, 6 inches of topsoil was placed over the fill and graded. This area was then hydroseeded and fertilized.
- Installation of site access controls (fencing) around the entire perimeter of the facility.
- Deed notices and restrictions were imposed on the property to ensure that the cover and contamination below are not disturbed, wells are not installed on the site, and that future actions are consistent with the remedy objectives.

NPL List: October 10, 1989 ROD Date: May 10, 1993

Remedial Action Report: September 26, 1996

1st Five-Year Review: September 28, 1999

2nd Five-Year Review: September 30, 2004

Post –Remedy Development:

Two slab buildings and a parking lot have been constructed on-site after 6-8 feet of fill was placed to raise the buildings above the 100-year flood plain.

Current Activities:

- A Five Year is being developed for signature by Sept 2009. An ad has been placed in the Chehalis Chronicle alerting local citizens of the 3rd Five Year Review and encouraging anyone with information or questions to call the EPA RPM.
- Mr. Pullin is planning to move the on-site retention pond to another portion of the site. He will provide drawings of the proposal to EPA and WDOE so we may verify that his plans keep intrusive activity above the cap.

Current owners are: 1) Darrell Peterson (southern parcel currently undeveloped – wetlands & former landfill), 2) D&K Properties, Inc. (middle parcel currently Thorbecke's FitLife Center – former mill & drying kilns), and 3) Maryilyn & Roger Gregory (northern parcel currently Industrial Hydraulics, Inc – former treatment area & surfaced impoundment).

Current Issues:

Third Five Year Review Report will likely include the following recommended actions:

1. One of two remaining monitoring wells network has been compromised by subsidence. Anticipated recommended actions will be to abandon the remaining damaged well and sample the one remaining viable well on a regular basis. Down-gradient off-site samples showed low levels of PAHs but all below MTCA Method B cleanup standards.

Per CERCLA, the NCP, and the American Crossarm State Superfund Contract, Operation and Maintenance for the Site is to be performed by WDOE. The American Crossarm and Conduit Monitoring Results November 2000 and April 2001 prepared by WDOE state that "The effectiveness of the remedial action will be reviewed by the project manager and staff, and a decision will be made by the fall of 2001 to determine if long-term monitoring should be continued or concluded". This decision was not formally made in 2001, and in the absence of such decision WDOE has discontinued monitoring.

- 2. Determine whether or not the site is a continuing source of dioxin in the adjacent creek. Anticipated recommended actions will be to sample Dillenbaugh Creek, the off-site lagoon, and the City of Chehalis storm sewer line. If the site remains a source of dioxin in Dillenbaugh Creek, the recommendation will include evaluation of the ecological exposure pathway of fish and consideration of whether human consumption of fish is significant as the original Risk Assessment did not. Dioxin levels in the Creek in 2005 ranged from 3.7 790 ppt.
- 3. Because site conditions have changed considerably since completion of the existing O&M Manual, dated 1996, an anticipated recommended action will be to update this Manual.
- 4. The Washington Department of Ecology ("WDOE") has not documented O&M inspections since issuance of the 2nd Five Year Review Report in September 2004. It also does not appear that WDOE has consistently performed O&M. An anticipated recommended action will be to have WDOE perform and document O&M as required by CERCLA, the NCP, and the Superfund State Contract for the Site.
- 5. Indoor air exposure has been evaluated and unknown levels of CPAHs, PCP and dioxin remain at depth (~17 deep). May recommend a vapor intrusion evaluation.
- 6. Consideration should be given to de-listing the site after an opportunity to confer has been made with WDOE and after the above items are addressed.

